

UTERINE CANCER

BACKGROUND

Facts about uterine cancer

- Uterine (yoo-ter-in) cancer is the most common reproductive cancer in Massachusetts women.
- Uterine cancer is the fourth most common type of cancer in Massachusetts women.
- Uterine cancer can occur at any age, but the chance of having it is highest in women age 45 and older.
- All women can protect themselves from uterine cancer by making healthier choices and talking to their health care professionals if they have symptoms that could be caused by uterine cancer.
- **The good news is that uterine cancer will produce noticeable symptoms in its early stages, when treatment is the most effective.**

What is uterine cancer?

- The uterus is the womb or a muscular organ that carries a developing fetus or baby that is above the birth canal. It is a part of the reproductive system of women.
- Fibroids are noncancerous growths in the uterus composed mostly of muscle and connective tissue.
- Endometrial cancer is the most common type of cancer of the uterus. Endometrial cancer develops in the lining of the uterus. Most endometrial cancers are adenocarcinomas.
- Uterine sarcoma develops in the muscle of the uterus.

What are the signs and symptoms of uterine cancer ?

Symptoms of uterine cancer include:

- Unusual vaginal bleeding or discharge
- Pain during intercourse
- Pain in the pelvic area
- Difficult or painful urination
- Feeling a mass in your uterus
- Pain in the lower back

Uterine cancers are found early and treated because the symptoms are specific to the reproductive system.

If you have symptoms that are not associated with a regular menstrual cycle or period, then talk with your health care professional about any questions you may have about the symptoms.

What are the risk factors for uterine cancer?

Factors that increase a woman's risk of uterine cancer include:

- Age (Uterine cancer can occur at any age but the chance of having it is highest in women age 45 and older).
- Personal history of colon and/or breast cancer .
- Family history of uterine cancer .
- Being more than 20 pounds overweight.
- Never giving birth or late age of first childbirth (after age 30) .
- Having cysts or tumors on the ovaries .
- Taking estrogen without progesterone after menopause .
- Taking tamoxifen (a drug given to women who have had breast cancer to lower the risk of recurrence).
- Early menstruation (before age 13) or late menopause (after age 55), both of which result in a woman menstruating over a longer period of time .
- Prior pelvic radiation therapy .

Factors that might possibly increase a woman's risk of uterine cancer include:

- Eating a diet high in fat.
- Hypertension (high blood pressure).
- Diabetes.
- Ovaries that do not produce eggs, or other menstrual problems .
- Never having used oral contraceptives, or having used oral contraceptives for fewer than 5 years.

PREVENTION AND SCREENING

How can I reduce my risk of developing uterine cancer?

Ways to lower the risk of uterine cancer:

- If you are currently take estrogen after menopause, talk to your health care professional about the possibility of taking progesterone with the estrogen.
- Maintain your weight and avoid continually gaining weight over your entire adulthood.
- Eat foods low in fat.

Screening for uterine cancer

Diagnosis at the earliest possible stages makes treatment much more effective. At this time, no screening tests are routinely recommended for early detection of uterine cancer.

If you have any of the symptoms listed, talk to your health care professional right away.

DIAGNOSIS AND TREATMENT

This site provides general information that may apply to your specific situation. You may visit the National Cancer Institute's web site www.cancer.gov for the most current cancer information and clinical trials. Once there, you will be able to select from a full range of cancer topics. If you want to speak with a cancer information expert confidentially, you may call 1-800-4CANCER (1-800-422-6237) between 9:00 AM - 4:30 PM.

It is always best to discuss your personal risk for cancer as well as your screening, diagnosis and treatment needs with your health care provider before you commit to a course of action.

How is uterine cancer diagnosed?

If your health care professional suspects uterine cancer, they generally will require a pelvic exam and a biopsy of the lining of the uterus (*endometrial biopsy*). A *dilation and curettage (D&C)*, which involves scraping the wall of the uterus, may also be performed.

Endometrial biopsy is done using a thin, flexible tube that is inserted through the vagina into the uterus. An ultrasound is used to find abnormal areas in the uterus. The tube is guided to the abnormal areas in the uterus and suction is used to collect a small amount of the endometrial tissue. This procedure can be done at the doctor's office with only mild discomfort.

Hysteroscopy is done by expanding the uterus using saline (salt water). A tiny telescope is guided into the uterus through the vagina to look for abnormal areas or polyps in the uterus. If an abnormal site is seen then a biopsy can be done during this procedure.

Dilation and curettage (D&C) is an outpatient procedure that requires general anesthesia. The cervix is dilated (enlarged) and a special instrument is used to scrape the inside of the uterus and collect endometrial tissue.

The endometrial tissue taken during these procedures will be checked under the microscope to see how the cells look when compared to normal cells. A "low grade" means the endometrial tissue taken in the biopsy looks like normal tissue. A "high grade" cancer tends to grow and spread quicker than a "low grade" cancer.

How is uterine cancer treated?

Cancer that is confined to the uterus can be treated with a *simple hysterectomy* (an operation to take out the uterus). Cancer diagnosed at a later stage may require more extensive surgery such as a *radical hysterectomy* where the uterus and surrounding tissues are removed or a *bilateral salpingo-oophorectomy* surgery that removes both the fallopian tubes and ovaries.

Radiation can be done by using *external beam radiation* or *brachytherapy*. *External beam radiation* is a high-energy radiation that is delivered at precise points into the body by a radiation machine. This allows the radiation to only become concentrated in the area of the cancer and the rest of the body doesn't become radioactive. The beam radiation is done over a long period of time. *Brachytherapy* is when the radioactive material is placed inside the body, generally

through the vagina. This is done while the patient is at a hospital and can be monitored. This type of radiation therapy may have to be done several times.

Chemotherapy is a drug or a series of drugs that are given to a patient through the vein or taken in a pill form. Chemotherapy is given when the uterine cancer has spread to other parts of the body.

You and your health care professional should discuss the options, and together make a decision about what treatment is best for you.

STATISTICS

How many people are diagnosed with uterine cancer? How many people die from it?

- The American Cancer Society estimates that in 2008 there will be 40,100 new cases of uterine cancer in the United States. There will be an estimated 1,120 new cases of uterine cancer in 2008 in Massachusetts.
- The American Cancer Society also estimates in 2008 there will be 7,470 deaths from uterine cancer in the United States. There is no 2008 estimate for deaths from uterine cancer in Massachusetts.
- National five-year relative survival rates for 1996-2004 show that 89.4% of females under 50 years of age and 83.2% of females that are 50 years of age and over survive five years after a diagnosis of uterine cancer.
- In Massachusetts between 2001 and 2005, the age-adjusted incidence rate of uterine cancer for women was 28.6 per 100,000 females.
- The age-adjusted mortality rate for uterine cancer in Massachusetts women was 4.4 per 100,000 females between 2001 and 2005.
- The age-adjusted incidence rate of uterine cancer is 23.8% higher in Massachusetts than nationally (based on data from the North American Association of Central Cancer Registries, 2001-2005).
- The age-adjusted mortality rate of uterine cancer is 7.3% higher in Massachusetts than nationally (based on data from the North American Association of Central Cancer Registries, 2001-2005).

For additional statistics on uterine cancer in Massachusetts, see Massachusetts Community Health Information Profile (MassCHIP) Instant Topics-Cancer: Uterine [<http://masschip.state.ma.us/InstantTopics/affiliate.htm>]. Please click on an affiliation, select *Cancer* in the Instant Topic list, and then select *Cancer: Uterine*.

DPH PROGRAMS AND INFORMATION

DPH uterine cancer programs

The Massachusetts Department of Public Health's Cancer Prevention and Control Initiative focuses on reducing cancer risk, incidence, morbidity, and mortality by promoting a healthy lifestyle, early diagnosis, treatment, rehabilitation, and access to care. The Department's programs address the impact of tobacco, alcohol, nutrition, physical activity, school health issues, and environmental and occupational hazards on cancer.

Publications and materials

Reports

The following reports can be accessed from the Massachusetts Cancer Registry website at <http://www.mass.gov/dph/bhsre/mcr/canreg.htm>:

- *Cancer Incidence and Mortality in Massachusetts, 2001-2005*
- *Cancer Incidence in Massachusetts 2001-2005: City and Town Supplement*

RELATED LINKS

Background/General Links

American Cancer Society (ACS)

- Cancer Reference Information: All About Endometrial Cancer
http://www.cancer.org/docroot/cri/cri_2x.asp?sitearea=c&dt=11
- Cancer Reference Information: All About Uterine Sarcoma
http://www.cancer.org/docroot/cri/cri_2x.asp?sitearea=c&dt=63

Centers for Disease Control and Prevention (CDC)

- Cancer Prevention and Control
<http://www.cdc.gov/cancer/index.htm>

Harvard School of Public Health

- Disease Risk Index
<http://www.diseaseriskindex.harvard.edu/update/>

National Cancer Institute (NCI)

- Endometrial Cancer Home Page
http://www.cancer.gov/cancer_information/cancer_type/endometrial/
- Uterine Sarcoma Home Page
<http://www.cancer.gov/cancertopics/types/uterinesarcoma/>
- What You Need To Know About Cancer of the Uterus
http://www.cancer.gov/cancer_information/doc_wyntk.aspx?viewid=2c8dc4da-1a72-4e79-9a97-58b82fe64a87

Prevention and Screening Links

National Cancer Institute (NCI)

- Endometrial Cancer (PDQ): Prevention
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=9df28c90-d979-494e-b9fc-54926b612a48
- Endometrial Cancer (PDQ): Screening
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=7ef79697-9b03-4e27-a616-953773b0dbad

Diagnosis and Treatment Links

American Cancer Society (ACS)

- Uterine Cancer Profiler Treatment Decision Tools
<http://www.cancer.nexcura.com/Interface2.asp?CB=272&NewSession>

National Cancer Institute (NCI)

- Clinical Trials
http://www.cancer.gov/clinical_trials/
- Endometrial Cancer (PDQ): Treatment
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=05637578-0d69-4875-91a9-078dcea24bae
- Uterine Sarcoma (PDQ): Treatment
http://www.cancer.gov/cancer_information/doc_pdq.aspx?version=patient&viewid=8620d7f2-67dc-4e53-9493-e4bd32103102

Statistics Links

American Cancer Society (ACS)

- Statistics
http://www.cancer.org/docroot/stt/stt_0.asp

Massachusetts Department of Public Health

- Massachusetts Community Health Information Profile (MassCHIP)
<http://masschip.state.ma.us/>

National Cancer Institute (NCI)

- Surveillance, Epidemiology and End Results (SEER) Cancer Statistics Review, 1975-2004
http://seer.cancer.gov/csr/1975_2004/

North American Association of Central Cancer Registries (NAACCR)

- *Cancer in North America* Publications
http://www.naaccr.org/index.asp?Col_SectionKey=11&Col_ContentID=50